

Notice of Allowability

Application No.

10/688,190

Applicant(s)

ANDERSON ET AL.

Examiner

Timothy Edwards, Jr.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to filing date of October 16, 2003.
2. ☒ The allowed claim(s) is/are 1-63.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-63 are allowed.
2. The following is an examiner's statement of reasons for allowance: with respect to claim 1, the closes prior art Fruhauf '667, fails to teach or suggest in the environment of an apparatus, which integrates power and bi-directional data transmission in control of operation and monitor information from various electrical equipment modules comprising, a two conductor alternating current electrical power including, a voltage supply conductor and a return conductor for power distribution, also as an asynchronous data transmission, the data signal comprises bursts of sinusoidal waves superimposed on the electrical power transmitted on the two conductors and the superimposition occurring with a single half-cycle of selected polarity of the alternating current electrical power. With regard to claim 30, prior art of record fails to teach or suggest superimposing a modulation frequency onto the alternating current electrical power, introducing a 180-degree phase shift into the modulation frequency after a particular quantity of cycles of the modulation frequency, the phase shift to be used as a timing reference, and continuing the modulation frequency for a total quantity of synchronization cycles of the modulation frequency, transmitting a set of data bytes by further superimposition of the modulation frequency, each bit of each byte being assigned to corresponding bit-wise time slot from a set of bit-wise time slots, each bit-wise time slot being referenced in time from the timing reference. With respect to claim

46 prior art of record fails to teach or suggest a method of receiving data on a two-conductor system comprising steps a-h.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wallace et al '314, Sagalovich et al '811 and Propp et al '106 disclose asynchronous transmission on a power line.

Hatfield '678, Durkee '886, Gajjar '126, Thayer '474 and Belcher et al '482 disclose superimposing sinusoidal data at the zero-crossings of an alternating current power signal.

Harris '247 teaches each subsystem selecting a slot injecting digital data on a transmission line.

Rynhart et al '463, DeHart '215, Anderson et al '468, Bireley '974 and Anderson 443 teach a method of determining moisture content using a two-conductor system.

Any inquiry concerning this communication should be directed to Examiner Timothy Edwards, Jr. at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

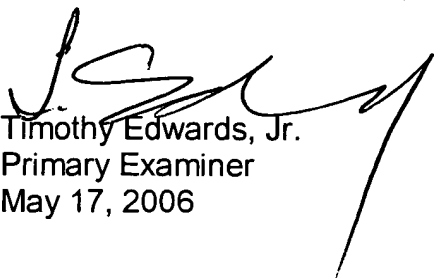
If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached at (571) 272-7308.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Timothy Edwards, Jr.
Primary Examiner
May 17, 2006